

What is claimed is:

1. A fluid mount comprising:

a first subsystem including a first cylinder and a first piston, the first piston moving within the first cylinder; and

5 a second subsystem including a second cylinder and a second piston, the second piston moving within the second cylinder, the second piston moving concurrently with the first piston.

10 2. The fluid mount of claim 1 wherein the first piston moves along a first axis and the second piston moves along a second axis that is substantially coaxial with the first axis.

3. The fluid mount of claim 1 further comprising a piston connector that couples the first piston and to the second piston so that the first piston and the second piston move concurrently.

15 4. The fluid mount of claim 4 wherein the piston connector extends around the second cylinder.

5. The fluid mount of claim 3 wherein the piston connector is encircled by the second cylinder.

20 6. The fluid mount of claim 1 wherein the first piston cooperates with the first cylinder to define a first chamber and wherein the second piston cooperates with the second cylinder to define a second chamber.

7. The fluid mount of claim 6 wherein the first chamber is in fluid communication with the second chamber.

8. The fluid mount of claim 6 further comprising an intermediate chamber positioned between the first chamber and the second chamber.

9. The fluid mount of claim 8 further comprising a control system that adjusts a pressure inside the intermediate chamber to be below atmospheric pressure.

5 10. The fluid mount of claim 8 further comprising a control system that adjusts the pressure inside at least one of the chambers.

11. The fluid mount of claim 1 wherein the second subsystem is positioned directly above the first subsystem.

12. The fluid mount of claim 11 wherein the second subsystem is stacked on top of the first subsystem.

10 13. The fluid mount of claim 1 further comprising (i) a third subassembly that includes a third cylinder and a third piston moving within the third cylinder, and (ii) a piston connector that couples the first piston, the second piston and the third piston together so that the pistons move concurrently.

15 14. The fluid mount of claim 13 wherein the third piston moves along a third axis that is substantially coaxial with the first axis and the second axis.

15. An isolation system including the fluid mount of claim 1.

16. An exposure apparatus including an apparatus frame and the fluid mount of claim 1 securing the apparatus frame to a mounting base.

20 17. A device manufactured with the exposure apparatus according to claim 16.

18. A wafer on which an image has been formed by the exposure apparatus of claim 16.

19. A fluid mount comprising:

a first subsystem including a first cylinder and a first piston, the first piston moving within the first cylinder along a first axis; and

a second subsystem including a second cylinder and a second piston, the second piston moving within the second cylinder along a second axis wherein the second axis is substantially coaxial with the first axis.

20. The fluid mount of claim 19 further comprising a piston connector that couples the first piston and to the second piston so that the first piston and the second piston move concurrently.

21. The fluid mount of claim 19 wherein the piston connector extends around the second cylinder.

22. The fluid mount of claim 19 wherein the piston connector is encircled by the second cylinder.

23. The fluid mount of claim 19 wherein the first piston cooperates with the first cylinder to define a first chamber, the second piston cooperates with the second cylinder to define a second chamber, and the first chamber is in fluid communication with the second chamber.

24. The fluid mount of claim 23 further comprising an intermediate chamber positioned between the first chamber and the second chamber and a control system that adjusts a pressure inside the intermediate chamber to be below atmospheric pressure.

25. The fluid mount of claim 23 further comprising a control system that adjusts the pressure inside at least one of the chambers.

26. The fluid mount of claim 19 wherein the second subsystem is position directly above the first subsystem and the second subsystem is stacked on top of the first subsystem.

5 27. The fluid mount of claim 19 further comprising a third subassembly that includes a third cylinder and a third piston moving within the third cylinder along a third axis (the third axis being substantially coaxial with the first axis and the second axis).

10 28. The fluid mount of claim 27 further comprising a piston connector that couples the first piston, the second piston and the third piston together so that the pistons move concurrently.

29. An isolation system including the fluid mount of claim 19.

30. An exposure apparatus including an apparatus frame and the fluid mount of claim 19 securing the apparatus frame to a mounting base.

15 31. A device manufactured with the exposure apparatus according to claim 30.

32. A wafer on which an image has been formed by the exposure apparatus of claim 30.

20 33. A method for making a fluid mount, the method comprising the steps of:
providing a first subsystem including a first cylinder and a first piston, the first piston moving within the first cylinder;
providing a second subsystem including a second cylinder and a second piston, the second piston moving within the second cylinder; and

coupling the first piston and to the second piston with a piston connector so that the first piston and the second piston move substantially concurrently.

5 34. The method of claim 33 wherein the first piston moves along a first axis and the second piston moves along a second axis and further comprising the step of positioning the second subsystem relative to the first subsystem so that the second axis is substantially coaxial with the first axis.

10 35. The method of claim 34 wherein the step of positioning the second subsystem includes the step of stacking the second subsystem directly on top of the first subsystem.

36. The method of claim 33 including the step of controlling the pressure to each subsystem with a control system.

15 37. The method of claim 33 further comprising steps of (i) providing a third subassembly that includes a third cylinder and a third piston moving within the third cylinder, and (ii) coupling the first piston, the second piston and the third piston together with a piston connector so that the pistons move concurrently.

20 38. The method of claim 37 wherein the first piston moves along a third axis and further comprising the step of positioning the third subsystem relative to the first subsystem and the second subsystem so that the third axis is substantially coaxial with the first axial axis and the second axis.

39. A method for making an isolation system including the step of providing a fluid mount made in accordance with claim 33.

25 40. A method for making an exposure apparatus including the steps of providing an apparatus frame and securing the apparatus frame to a mounting base with a fluid mount made in accordance with claim 33.

41. A method of making a wafer utilizing the exposure apparatus made by the method of claim 40.

42. A method of making a device including at least an exposure process, wherein the exposure process utilizes the exposure apparatus made by the method
5 of claim 40.

43. A method for supporting a load comprising the steps of:
providing a first subsystem including a first cylinder and a first piston,
the first piston moving within the first cylinder along a first axis;
10 providing a second subsystem including a second cylinder and a second piston, the second piston moving within the second cylinder along a second axis that is substantially coaxial with the first axis;
connecting the first piston with the load; and
connecting the second piston with the load.

44. The method of claim 43 further comprising the step of controlling the pressure of at least one of the subsystems.

45. The method of claim 44 wherein the step of controlling the pressure of
20 at least one of the subsystems includes the step of controlling the pressure of each subsystem independently.